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THE LIMITS OF AIR CONTROL: THE RAF EXPERIENCE IN

ADEN, 1926-1967

A Research Paper

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by

Major Tony R. Mullis

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Abstract

The resurgence of the concepts of air control and air occupation has renewed debate on the efficacy of air power as a tool to achieve national objectives in situations short of conventional war. To better understand what air control is and what it has to offer for the future of air power, this study examines the British experience in colonial Aden from 1926 to 1967. Through examination of primarily secondary sources of the British political and military objectives in Aden, this paper provides the student of airpower with salient insights on the concept, development, and application of air control as a viable option to achieve national strategic objectives.

The study examines the historiography of the air control debate by discussing the issues associated with the concept. Unlike other studies on air control, this paper examines the British air control experience in a particular region from beginning to end. Most studies on air control have limited their analysis by restricting their discussion of air control to pre-World War II examples. This study's intent was to examine air control not only during its heyday in the 1920s, but during the more trying days of the Cold War as well. The British experience in Aden provided an excellent example of air control's successes and limitations. By analyzing what worked with the British air control effort in Aden, what benefits it offers today, and what limitations influence air control's success, this study demonstrates the applicability and cost effectiveness of air control as a foreign policy instrument in certain political situations, particularly in military operations other

than war (MOOTW). The study concludes with a realistic scenario of how air control as a viable political/military option can be applied to future MOOTW situations.

Chapter 1

Air Control: The Context

...[C]onventional air power's effectiveness as a political instrument varies according many diverse factors.

—Lt Col Mark Clodfelter, USAF

The Limits of Air Power: The American Bombing of North Vietnam

The efficacy of air power as a political instrument has long fascinated politicians and military theorists alike. Lt Col Clodfelter's statement refers to the use of air power in the Vietnam War, but the issue of air power's effectiveness in achieving political objectives is as old as flight itself. The concept of air control, as developed by the Royal Air Force (RAF) in its mission to police the British empire after World War I, offers an interesting twist to the debate of the political effectiveness of air power. Originally implemented to save money and manpower, air control's success in British Somaliland and Mesopotamia (Iraq) appeared to be a panacea. Air control functioned within Great Britain's fiscal constraints while achieving the empire's imperial security requirements. By the late 1950s, however, air control was no longer used exclusively to meet British colonial and political objectives. Was air control no longer effective? What events or developments caused the British to abandon air control as a means to achieve their political objectives? By analyzing the RAF's experiences in the Protectorate and Colony of Aden from 1926 until 1967, it is possible to address these salient questions, clearly define the concept of air

control, understand why air control was successful, examine what limitations constrained air control, and discuss the circumstances in which air control can work today and in the future.

The United States Air Force's interest in the concept of air control is not new. In June of 1954, the Air War College produced an interesting classified study on air control. The study, *Project Control Report PCR 1*, evolved to answer the question of how to use air power, short of nuclear war, to "prepare various schemes of operation which can be used to control Russia consistent with U.S. political goals."¹ The study used the RAF's perceived success in air control in Iraq and Aden as the basis for its conclusions that "Control by Air and Other Means" (CAOM) was effective and that RAF air control principles could be duplicated by the United States Air Force to achieve American political objectives in relation to the Soviet Union and the People's Republic of China. While the Cold War and the potential of nuclear holocaust were certainly the dominant political and military concerns of the 1950s, it is significant that American air strategists advocated the use of conventional air power through CAOM as a potential means to achieve political objectives short of nuclear war. As the *PCR 1* study advocated, air control or CAOM appeared to be a viable option available to national-level decision makers to "...control the behavior of hostile or potentially hostile nations."²

Both American and British political and military leaders looked to air power as a quick, inexpensive, and effective means to achieve their respective political objectives. The British, however, did not use air control to influence a nation's behavior. They used air control to accomplish what American military doctrine defines today as foreign internal defense within the broader context of nation assistance. Specifically, the British used air

power to control dissident's or other unruly people's behavior in colonial regions with the political objective of restoring and then maintaining law and order or internal security within the affected territory. Because of air control's success within the British empire, it is possible to glean valuable insights about the principles or doctrine behind what made air control successful and what constraints or limitations inhibited its application. It is these insights that make this study valuable to future United States Air Force and joint warfare doctrine.

Research Limitations

This study was limited to primarily secondary sources. The Historical Research Agency (HRA) proved to be of limited value in the study's effort to seek primary material related to the RAF experience in Aden. The HRA did, however, possess salient information on American perspectives of British air control operations. Access to declassified RAF operations reports (Form 504s) or squadron diaries would have provided greater insight into air control's effectiveness in Aden. There is also a lack of Adeni or hinterland tribal perspectives of air control's impact. The Form 504s would have provided an airman's view of air control operations. Adeni or hinterland sources would have provided the perspective of the recipients of air control and their views of its effectiveness. The study's conclusions are exclusively from a British perspective. Fortunately, the British dictated the political objectives to be achieved by air control and they determined air control's success or failure. Additionally, the study looks at only one example of air control in depth. What worked in Aden may not have been appropriate in other parts of

the empire such as Borneo or Malaysia. Despite these limitations, the study's conclusions about air control do make a contribution to the emerging air control debate.

Notes

¹*Project Control Report PCR 1*, (Maxwell AFB, AL: Air University, 1954),1. Hereafter cited as *PCR 1*. *PCR 1* is a declassified study maintained by the Historical Research Center, Maxwell AFB, Alabama.

²*PCR 1*, preface.

Chapter 2

Air Control and Aden: The Maturation

That the frontier has been maintained and that security has increased of recent years is due very largely to the Royal Air Force, acting in closest accord with the ground forces

During the 1920's the RAF—in Somaliland, Iraq, the Aden Protectorate, and the North West Frontier of India—proved that air control could be a cost effective substitute for land force manpower in policing remote and thinly populated areas.

—AP 3000 Royal Air Force Air Power Doctrine

Following World War I, the British did use air power to maintain law and order within the empire. The use of aircraft to maintain internal security in lieu of surface forces, however, was at best an unproved concept when the Great War ended. Aircraft had demonstrated their usefulness for reconnaissance and artillery spotting during the war, but there was no doctrine and very little experience with the use of air power to conduct policing operations. Once the war ended, Air Chief Marshal Sir Hugh Trenchard staunchly advocated the use of air power to maintain “internal security in areas with poor land communications.”¹ He believed that the key to the RAF’s potential success in policing remote regions of the empire lay in air power’s inherent characteristics of flexibility and mobility. Trenchard’s argument appealed to the British government because aircraft could reach a remote colonial area much quicker and perhaps more effectively than ground-based forces. Moreover, Trenchard firmly believed that aircraft

conducting air control operations would be particularly effective in areas with no rail, river, or road networks. This stipulation was critical because the British preferred the use of surface forces if an area's infrastructure allowed. Only in the undeveloped parts of the empire was air control considered a viable option. Ultimately, the combination of Trenchard's persistence and RAF success in early air control operations convinced the British government to adopt air control as a means to achieve its colonial objectives in remote areas of the empire.

While the RAF had no formal doctrine codifying or defining air control during its operations in Aden, several British officials offered insightful descriptions of air control. Sir Julian Paget, recognized expert on British policy in Aden, described air control as "using air attacks to punish rebellious tribes who refused to pay taxes, attacked civilians or disobeyed Government instructions."² In other words, air control was seen as nothing more than air policing or an airborne Internal Revenue Service. Air Chief Marshal Saundby, former Air Officer Commanding of Aden, said the purpose of air control was "to support the political authorities in their tasks of pacification and administration."³ Air control operations in Aden encompassed all of the above mentioned characteristics. Both descriptions looked to air power as the primary tool to punish or to persuade unruly dissidents to succumb to British or colonial authority. Additionally, British air control objectives prior to World War II were generally congruent with their political objectives leading to a desired end state of peace and stability in the remote hinterlands of Aden.

The earliest and perhaps most convincing illustrations of air control's successes occurred in Iraq and Aden during the 1920s. In terms of money, manpower, and casualties, an American study of air control in Aden during the 1920's found the British

use of airpower very effective. In 1925 the British government maintained a force of 25,000 troops in Aden. By 1926, however, some 2,000 RAF personnel had replaced the Army and performed the same mission. The cost to maintain British ground forces in 1925 was \$25 million, while the cost to maintain the RAF in 1926 was a mere \$2 million. The reduced manpower requirements influenced the casualty rates as well. The British Army suffered approximately 1,000 casualties in 1925 while the RAF noted only 1 in 1926.⁴ By means of air control in lieu of ground occupation, the British effectively reduced manpower requirements by 1/12th, cost by 1/22nd, and casualties by 1/1000th. As long as air power maintained internal security in remote areas and accrued significant cost and manpower savings to imperial policing, the British government was inclined to use air control to achieve its aims.

The use of air control in Aden appeared to be an effective tool of British policy in the 1920s and 1930s, but why and how did it work? In other words what made air control successful? In a 1921 study of the role of aircraft compared with land garrisons, aircraft were credited with the capability to guard against external aggression (conventional role) and could be used as a precaution against civil disturbance (police role). Aircraft were deemed suitable to show the flag (presence), provide a show of force in support of civil authority (persuasion/punishment), and were ubiquitous (omnipresent).⁵ The one mission aircraft could not accomplish was the physical occupation of an enemy nation to enforce peace terms. Additionally, the Cairo Conference of 1921 proclaimed airpower as an effective means to “control sparsely populated regions of desert and mountain where dissidence and relatively minor problems of internal security tended to be the order of the

day.”⁶ To meet imperial policing requirements as they existed in the 1920s and 1930s, air control was the perfect solution.

Air control, on the other hand, was much more than aircraft. The British relied on surface support from RAF Levies (indigenous troops) and RAF Armored Car Companies (security forces) to achieve and maintain internal security. The airfields from which RAF aircraft operated required their own security forces. The Aden Protectorate Levies (APL) and RAF Armored Car Companies provided this support. Additionally, they would also accompany aircraft in security operations as circumstances dictated. Often, British Political Officers required protection afforded by the APL or Armored Car Companies to reach hostile tribes or secure passage through hostile areas. These surface elements worked in conjunction with air assets to ensure freedom of movement for those types of operations.

When trouble occurred in the remote regions of Aden after 1926, the RAF typically responded with fairly routine but effective procedures for applying air control. The RAF adopted an “almost set procedure by which the first signs of trouble were met with an aerial demonstration and perhaps a few non-lethal bombs, followed where necessary by committal of the local gendarmerie, local levies, and finally if absolutely unavoidable systematized aerial bombardment, and the deployment of local or British troops from their normal concept-of-power and riot control roles...”⁷ The following offers a common air control decision matrix:

1. An offense (crime/raid/disturbance) is committed.
2. Decision of guilt determined and fine levied (fine in money or rifles).
3. If the fine is not paid, the RAF targets and photographs the transgressors property to ensure the guilty’s towers or houses are properly identified.

4. 24 hours prior to the RAF bombing operation, notice is given by air and by agent to the transgressor to evacuate the village or area. If he makes amends the operation is terminated.
5. If there is no response, another notice is given by air one hour prior to the bombing.
6. If no response, the RAF would begin bombing the guilty party's property roughly equivalent to the assessed fine. In essence, this was as "eye-for-an-eye" approach which was a culturally acceptable means of retribution.
7. Following the punishment, the tribesmen would return to their village to repair the damage having seen governmental authority applied and to continue their lives.⁸

RAF bombing operations would destroy buildings or other property, but would never inflict casualties as long as the tribesmen complied with prior warnings to evacuate. If surface forces had engaged in punishing the transgressors without the benefit of successful air control operations, the likelihood of casualties on both sides would have increased markedly. Perhaps the most outstanding benefit of air control operations in Aden was the fact that air actions "seldom [left] any lasting resentment and more often than not normal relations have been restored with offenders in a few months..."⁹ The lack of casualties on both sides and the consent to British authority by recalcitrant tribes created an environment which facilitated this return to normalcy after RAF-led operations. In essence, air control operations maintained internal security of the Aden Protectorate while achieving an end state of a better state of peace which limited resentment and reduced the likelihood of further difficulties.

One of the earliest examples of air control occurred in Aden when trouble erupted among the Zeidi tribe of the Dhala region in 1927 (Figure 1). The RAF generally followed the steps outlined in the decision matrix mentioned earlier. They issued an ultimatum to the tribes which included the threat of bombing. When the Zeidi tribe failed to meet government terms, the RAF began bombing operations. Following the RAF

attack, the Zeidi withdrew in compliance with the government ultimatum and the area was pacified achieving the desired end state.¹⁰ In another variant of air control, the RAF bombed Yemeni positions in Dali during February 1928 to secure the release of captive pro-British Sheiks held by Yemeni tribesmen. When the initial bombing failed to gain the Sheik's release, London "decided to follow the Air Force's doctrine that aircraft knew no boundaries and demonstrate to the Imam (Yemeni leader) that the British machines could strike at will at Yemeni territory."¹¹ The RAF's persistence proved fruitful and achieved release of the Sheiks demonstrating to Aden's hostile neighbor to the north Britain's resolve and capability to project power. Air control had seemingly proven its ability to maintain internal security and project power as a foreign policy tool when necessary. Supporters of air control emphasized the concept's simplicity, cheapness, effectiveness, and humanity. Ultimately, air control provided the means the colonial government could use to assert its will swiftly and firmly without the need to commit ground forces while significantly reducing the chance for casualties on either side.¹² Aden's political and security objectives had been met through air control.

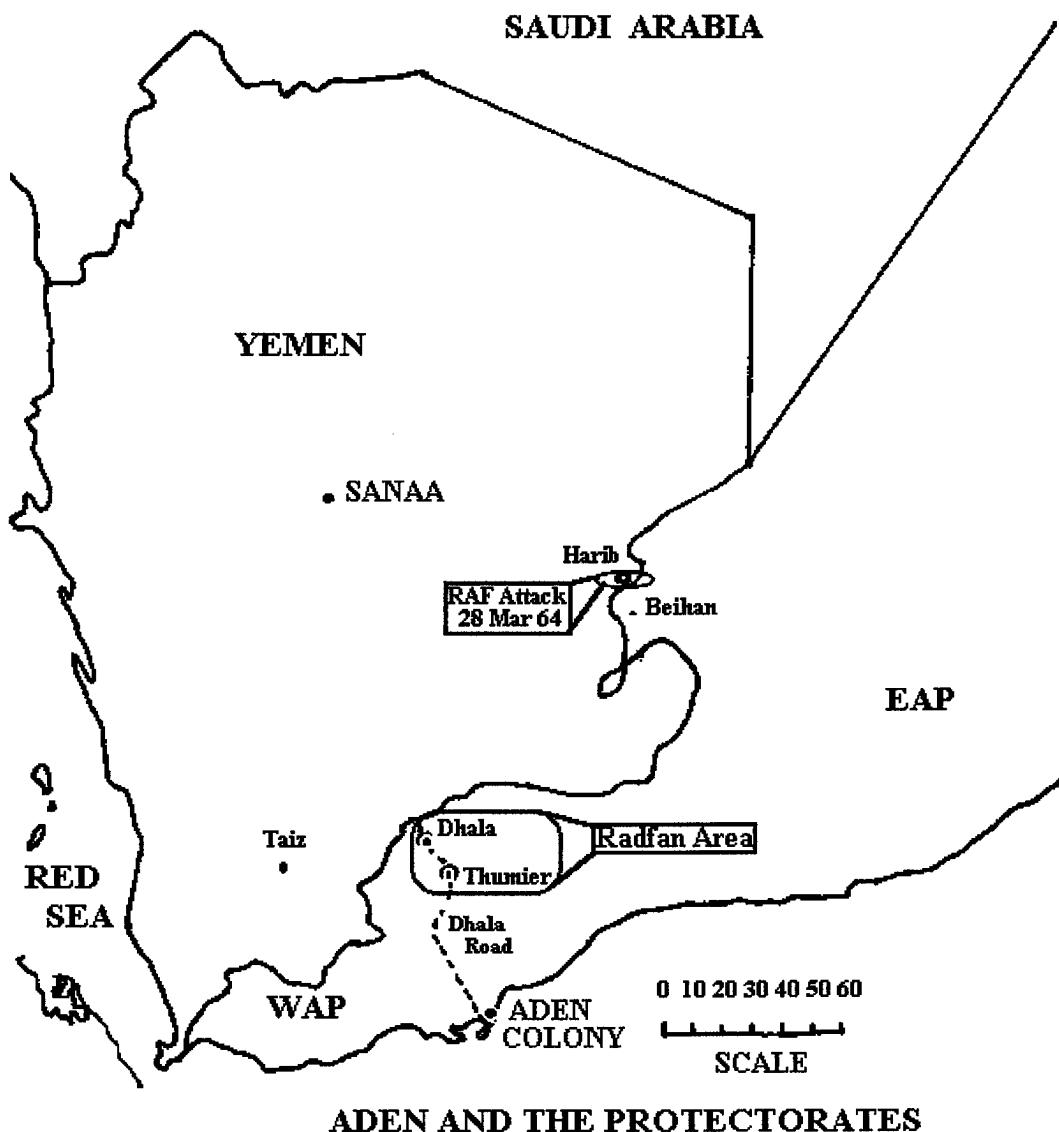


Figure 1. Aden and the Protectorates

Unfortunately, air control was “a ‘stick’ applied without any accompanying ‘carrots’.”¹³ There were no other attempts to win the tribesmen allegiance except retaliation, normally through air control.¹⁴ The short-term benefits of air control failed to establish a long-term commitment by the tribesmen of the Aden Protectorate to either British or Adeni colonial authority. But as long as tribesmen in the various regions of the

Aden Protectorate accepted or consented to British rule and law-breaking dissidents accepted their punishment, Aden remained peaceful and relatively stable. The inherent characteristics of air power—speed, range, flexibility, and lethality—were key to air control's success in Aden. Trenchard's earlier persistence had paid handsome dividends for air control and imperial policing in Aden and the Aden Protectorates in the 1920s.

Air control in the next decade proved just as successful. With the worldwide depression engulfing the world, Great Britain continued its imperial policing requirement via its relatively inexpensive, but highly effective concept of air control. The air control operation against the Quteibi tribe was illustrative of air control's success in the 1930's.

Shortly after the British and the Imam of the Yemen signed the Treaty of Sanaa in 1934, the Quteibi tribe tested the colonial government's resolve to enforce treaty stipulations. Members of the Quteibis violated the Treaty when they raided a caravan from Yemen challenging the Aden government's commitment to keep the Dhala road open to traffic. The British summoned the Quteibi Sheik to meet the Political Officer at a neutral site to resolve the dispute. Since the British determined the Quteibi chief controlled the perpetrators of the raids, the Sheik received the traditional ultimatum.¹⁵ He was given the choice of handing over the raiders or the group's hostages plus a \$500 fine or suffer RAF bombing. The British gave the Quteibis ten days warning. During the ten days, the RAF identified appropriate targets for destruction in accordance with established air control procedures that had worked so well in the 1920s. Within minutes of the announced deadline, the RAF conducted bombing operations. The bombing was preceded by political officers and local agents on the ground who had arrived earlier to ensure the homes of the guilty party's were targeted to avoid harassing the innocent.

Following the initial bombing, RAF aircraft conducted day and night harassment operations causing the Quteibis to become defiant, disillusioned, and finally bored and frustrated. Effective Koran-based propaganda dropped from RAF aircraft coupled with delayed action bombs lodged in the tribe's farming land convinced the tribe to sue for peace through a neighboring Sultan.¹⁶

The Quteibi operation worked according to the precepts of air control. Only the guilty were targeted and attacked. “[N]o sense of injustice could be left, particularly by making the mistake of attacking the innocent.”¹⁷ Once the recalcitrant tribe or guilty tribesmen sued for peace, paid the fine, and returned the hostages, the RAF deployed Explosive Ordnance Demolition teams and medical teams to the affected area to restore and build good will among the Quteibis. Perhaps Air Commodore Portal summarized air control’s impact best when he said in relation to another raiding incident in 1935: “Through *air pressure* the tribe was *persuaded* to give up the guilty murders, pay a fine, and agree to desist from further raids in the future. *In other words, the tribe was forced to accept terms of peace through the application of air power used with the political objective of maintaining law and order.*”¹⁸

Proscription or inverted blockade proved to be another effective technique of air control developed during the 1930s. Proscription used air power or the threat of bombing to force disruptive tribes out of their villages and into the countryside to subsist as best they could. The goal of proscription was to deny or prevent shipments of arms or foodstuffs into the affected villages in lieu of trying to interdict incoming supplies. Once the tribes people tired of living off the land and the guilty party’s surrendered or paid their fines, proscription was lifted and life returned to normal. In consonance with the

British desire to persuade rather than punish dissident populations, RAF “bombing was increasingly designed to restrict peoples’ movements,...controlling access to or exit from a particular area, which was believed to have the correct psychological lesson, rather than to kill either humans or stock.”¹⁹ Air blockade worked within the accepted precepts of minimal force and no casualties while achieving the government’s desired end state.

Prior to World War II, air control proved itself as a viable means to achieve internal security and limited British foreign policy objectives in Aden and its hinterlands. The geography or topography of Aden was certainly a factor in air control’s success. Desert areas and, to a lesser degree, mountainous terrain were ideal for the employment of air power. The remote nature of Aden’s hinterlands and the lack of a modern transportation infrastructure encouraged the use of air power to achieve British political objectives. Moreover, the British displayed exemplary sensitivity to cultural and religious sensitivities of the Protectorate tribesmen in their application of air control.

The RAF exploited traditional characteristics of air power as well. Speed, range, and elevation allowed the RAF to locate and track dissident movements over desert terrain where even camel tracks could be followed.²⁰ Weather, of course, could and did inhibit air operations, but on the whole the territory of South Arabia lent itself to effective air control. Air power’s ubiquity proved advantageous as well. Airplanes could reach all areas of Aden and its hinterland without restriction short of weather and spare parts. Fortunate for the British, the RAF’s logistics system met the demanding task of keeping RAF aircraft operational.

Other reasons for air control’s success centered on air superiority and precision. The RAF possessed absolute air superiority during the interwar period and faced no credible

surface threat from hinterland dissidents. “This ability to operate wherever and whenever [the RAF] wished is possibly the most important and most often ignored aspect of these type operations.”²¹ Precision was also a key tenet to air control’s success. While aerial bombardment of the 20s and 30s was not precise by today’s standards, the air control protocol provided enough warning to villagers to evacuate a target area prior to RAF attacks. If the villagers heeded the warnings, which they normally did, the likelihood of civilian casualties was minimized regardless of the RAF’s bombing accuracy. Fortunately, the RAF was well trained, quite accurate, and even prided itself on its precision bombing. The overriding goal, however, was to achieve pacification at minimum cost using minimum force. Air control met both of these political requirements.

Another equally important part of air control was the surface support provided by the APL, the Armored Car Companies, and the Political Officers. Air power was the primary means to achieve colonial security and foreign policy objectives, but the surface support forces were necessary to help pacify local dissidents and provide the human interface necessary to enhance tribal/government relationships. Lastly, as air control evolved, the British began to use air power as a carrot as well as a stick. The RAF used its aircraft to build good will amongst the indigenous population through famine relief, medical support, and other transport requirements. Under the favorable circumstances of the inter-war period, air control matured from a Trenchardian concept into a viable, successful, and cost-effective doctrine. World War II and the ensuing Cold War, however, would alter those favorable circumstances and force air control doctrine to adapt to those changes.

Notes

¹Brigadier J.D. Lunt, "The Evolution of an Army," *Royal Uniformed Services Institute Journal (RUSIJ)*, (May 1965): 160-1.

²Sir Julian Paget, *Last Post: Aden 1964-1967* (London: Faber and Faber, 1969), 42. His description is based in RAF responsibility for Aden from 1928-1957. The Army took over responsibility for Aden in 1958.

³Lt Col David J. Dean, *Airpower in Small Wars: The British Air Control Experience* (Maxwell AFB, AL: Air University Press, April 1985), 8.

⁴PCR 1, Figure 6.

⁵Wing Commander Michael B.M. Canavan, *The Royal Air Force and Air Control to 1939* (July 1993), 29.

⁶Air Chief Marshal Sir David Lee, *Flight from the Middle East: A History of the Royal Air Force in the Arabian Peninsula and Adjacent Territories, 1945-1972* (London: Her Majesty's Stationery Office, 1980), 4.

⁷Anthony Clayton, *The British Empire as a Superpower, 1919-1939* (Athens, GA: University of Georgia Press, 1986), 380.

⁸Sir Julian Paget, *The Last Post: Aden 1964-1967* (London: Faber and Faber, 1969), 42-3 and Hickinbotham, 105-6.

⁹Hickinbotham, 107.

¹⁰Clayton, 150.

¹¹R.J. Gavin, *Aden Under British Rule, 1839-1967* (New York: Barnes and Noble, 1975), 283.

¹²Paget, 43.

¹³Bruce Hoffman, *British Air Power in Peripheral Conflict, 1919-1976* (Santa Monica, CA: RAND Corporation, October 1989), 25.

¹⁴Hoffman, 25.

¹⁵Canavan, 25. Text of ultimatum: "If you do not produce the fine and the men, you must leave all your villages and fields, taking your property and animals with you, and keeping away until the Government gives you permission to come back. The Government will do this as soon as you have complied with the terms. Until you have complied with the terms, your villages and fields may be bombed or fired on at any time by day or night, and you are particularly warned not to touch any bombs that do not go off, as if you do so you will probably get killed."

¹⁶Canavan, 25-7.

¹⁷Canavan, 27.

¹⁸PCR 1, 8.

¹⁹Clayton, 485. See also Dean, 9.

²⁰Hickinbotham, 102.

²¹Major Michael J. Petersen, "Wood, Fabric, and Wire: Insights for the Biplane Era, 1919-1936," *CADRE Air Chronicles*, (<http://www.cdsar.af.mil/cc.html>), 12 and 23.

Chapter 3

Air Control and Aden: The Demise

Global presence did not mean global power

—Anthony Clayton

The British Empire as a Superpower, 1919-1939

With the outbreak of World War II, British attention focused on defending the home islands and defeating Nazi Germany. Fortunately, Aden and the Aden Protectorates saw little activity during the war. When the war ended, however, the British turned their attention back to what remained of the empire. But the post-World War II world was a far different place than what it had been in 1939. Although she retained the trappings of empire, Great Britain was no longer a world power. The other pre-war colonial powers of Germany and Japan lay in ruins creating a post-war power vacuum in Europe and the Pacific. The emerging Soviet threat loomed not only over Europe, but the world as a whole. Within this strategic context, three factors greatly affected Britain's colonial policies in Aden. These strategic factors were nationalism, Egyptian President Gamal Abdel Nasser, and the Cold War.

The impact of these factors on British strategy in Aden in the fifties and sixties was profound. Prior to the Suez Crisis of 1956, RAF air control operations continued much the same as they had during the interwar period. Following the Suez Crisis and after the British placed the Army in charge of Aden in 1958, however, air control operations were

either eliminated or subordinated to ground operations. One reason for this change was the “air barrier.” Egypt and other hostile nations in the region restricted British aircraft movements within and throughout the Middle East and Arabian Gulf areas. This strategic limitation played a large role in the British decision to use deployed surface forces to achieve political objectives normally accomplished by air control. A detailed examination of British-led operations against dissident Radfan tribes in 1964 illustrates this point and other constraints and limitations imposed on British military leaders and why air control was not used to achieve British political objectives after 1958.

After three years of relative peace in the Radfan region of the Western Aden Protectorate (WAP), National Liberation Front (NLF) dissidents, operating from Yemen, began mining the all important Dhala road in late 1963. British and South Arabian Federation (SAF)¹ officials discussed three possible courses of action to handle the situation. Air control was the first discussed. The High Commissioner, Sir Kennedy Trevaskis, advocated the use of air power to counter the Radfani dissident threat much like what would had been done in the heyday of air control. The Army-led Middle East Command, however, opposed the High Commissioner. Air control was seen as ineffective in maintaining security along the Yemeni-WAP frontier or countering subversion in urban centers such as Aden Colony. Moreover, after the Suez crisis, “the traditional method of disciplining restive natives [air control] had become not only politically unacceptable, but also an international embarrassment.”² The image of a powerful Britain bombing “defenseless” Radfani tribesmen was too much for Middle East Command to endure. Therefore, air control was ruled out as impracticable under the existing circumstances.³

Civil action constituted the second course of action. It too was ruled out because a “hearts and minds” campaign was long-term and civil actions required “a degree of law and order to operate.”⁴ The third course of action was military force. Trevaskis feared possible escalation of the situation if significant ground forces were used against the dissidents in the Radfan. The physical presence of ground forces in the Radfan might incite more tribes to rise against the government instead of achieving pacification, especially if the ground forces were British. Middle East Command, however, wanted to use the newly formed Federation Regular Army (formerly the APL) supported by British regulars to restore order in the region. Basically this would be a test of the “Arabization” program implemented by the British to assist the SAF government in its ultimate transition to independence.⁵ To maintain peace and stability after the British left, an experienced and capable FRA had to be created.

To begin its road to independence, the FRA began Operation NUTCRACKER on 1 January 1964. It would be the first effort by the SAF to use its indigenous forces supported by British regulars to demonstrate its legitimacy and power. Since there was no SAF air force to use against the dissidents, the only way the SAF government could demonstrate its power and authority to the Radfanis was through the FRA supported by British ground and air elements. NUTCRACKER’s military objectives were to 1) conduct a show of force; 2) compel the enemy to withdraw from the area; 3) to convince the Radfan tribesmen of the SAF’s ability and will to enter the Radfan as and when it was inclined; and 4) to end the increased subversion from external powers, specifically Yemen.⁶ The measure of success for the operation would be the withdrawal of 12 named dissidents from the Radfan. Unfortunately for the British, there was no long-term plan or

desired end state for the Radfan region once military action was complete.⁷ In other words, once the dissidents had been compelled to leave, what should the political environment of the Radfan look like? The British, of course, were not unique in this failure to plan for conflict termination or conflict resolution. But the absence of a clearly defined and achievable end state left the military not only with vague objectives, but resulted in the use of inappropriate means to achieve those objectives. While the military often successfully achieved its objectives, its success was more often than not incongruent with British grand strategy for the SAF and the region.

Operation NUTCRACKER had two ancillary objectives as well. One was to conduct a show of force in the Wadi Misrah, specifically aimed at the ever troublesome Quteibi tribe. The other objective was to build a usable road through the Wadi Rabwa to the Wadi Taym for future use.⁸ Ironically, the lack of infrastructure in the Radfan region was one of the principle reasons air control was so effective. So why build roads now? One reason was the commitment to use FRA forces to maintain internal security. Without a secure road network to allow the FRA to respond to tribal dissidence or internal security situations quickly, the SAF could never be truly independent. Secondly, a well-designed road network would contribute to long-term civic actions necessary to build economic links between the hinterland and the urban center of Aden Colony. Both reasons supported the British grand strategic plan to create a viable SAF. Unfortunately for the British, the infrastructure building effort would be a too little too late affair.

The FRA dominated operation was successful. The FRA and associated British troops forced the dissidents out of the Radfan and re-opened the Dhala Road. Additionally, the FRA's success increased its prestige and power in the region.⁹ Its

victory, however, was short-lived. With no overriding political purpose or end state to guide them, the FRA found itself overextended. With its limited number of available forces, the FRA could not control the Radfan and monitor the Yemen border simultaneously. Subsequently, the FRA withdrew to a centrally located base at Thumier from which it could conduct future operations. Unfortunately, the FRA withdrawal allowed the dissidents to return to the Radfan from their sanctuary in Yemen. Additionally, the Egyptians were able to turn the FRA's military success into a political failure through an effective propaganda campaign. Radio Sanaa and Radio Taiz could proclaim the FRA withdrawal as a victory for the dissidents effectively raising rebel morale.¹⁰ By March 1964, dissident activity along the Dhala Road increased and the British planned yet another military operation in the Radfan to teach the dissidents a lesson.

The political objectives of the new operation were similar to those of Operation NUTCRACKER. The military was to 1) prevent tribal revolts from spreading; 2) reassert the SAF's authority; and 3) stop attacks on the Dhala Road. The military aim was "to end the operations of dissidents in the defined area."¹¹ This vague objective was difficult to achieve. Without precise and accurate intelligence on the location and strength of the dissidents, how could the FRA end dissident operations. There were no clearly identified military objectives to secure or defined areas to secure.¹² Like Operation NUTCRACKER, the second expedition into the Radfan lacked a clearly defined and achievable end state. Nonetheless, the military instrument of power was seemingly the only means by which the British and FRA hoped to quell the dissident activity.

As the British prepared for the second operation of the Radfan War, the nature of the conflict changed. Yemeni aircraft conducted raids near the WAP village of Beihan in March while dissident attacks on the Dhala Road increased. The Yemeni air attacks were particularly troublesome for the British and the SAF. Ground forces were not permitted to cross into Yemen to conduct retribution actions. The RAF, however, could. Pressure from pro-British Sheiks in the Beihan area demanded action in accordance with established defense treaties between the SAF and Britain. British inaction would have alienated the Sheiks and lessened the government's prestige.¹³ Air power offered the best solution. Reverting to proven air control principles, the RAF targeted Harib fort within the Yemen border for retribution (See Figure 2). The destruction of the fort had the objective of stopping Yemeni aircraft incursions into WAP territory. The target was strictly military and sat two miles from the village of Harib. RAF aircraft dropped warning leaflets 15 minutes prior to the air attack to reduce physical damage and avoid civilian casualties. To minimize inadvertent casualties, the RAF used only rockets and cannon fire in its attack. The RAF attacks were accurate and effective.¹⁴ Despite this successful application of air control, the repercussions were extremely damaging to the British efforts to secure an independent SAF given the strategic environment of the 1960s.

On 2 April 1964, the Yemeni representative to the United Nations "charged Britain with 'a barbaric air attack' on Yemen territory..."¹⁵ Soviet leader Nikita Khrushchev echoed the Yemeni claim when he "condemned the 'barbaric bomb attacks on the independent Yemen Republic.'"¹⁶ The Yemeni claimed 25 people were killed from the British bombing raid. The Yemeni allegations could not be definitively proven nor disproved by the British. Nevertheless, the RAF's air control operation against Harib fort

lasted no more than an hour, just long enough to conduct the rocket attack, destroy the fort, and leave a strong political message to the Yemenis. By this study's definition of air control, the operation was a resounding success. Following the RAF raid, Yemeni aircraft stopped their attacks in WAP territory for the immediate future. The political and military objectives were satisfied. The political consequences of the attack, however, were overwhelming.

The United Nation Security Council passed a resolution on 9 April calling on both sides to keep the peace.¹⁷ While this ostensibly impartial resolution's intent was sound, the British saw the resolution as a threat to its authority to defend the WAP. The British had presented their case supporting their retaliatory action earlier to the United Nation's Committee of 24 on 26 March. They cited several minor incursions and at least three deliberate air attacks by Yemeni aircraft in the WAP prior to the 28 March raid on Harib fort.¹⁸ Despite the British argument to the contrary, the general perception of British actions was one of a bully using its might to pummel a weak neighbor. The *Times*,

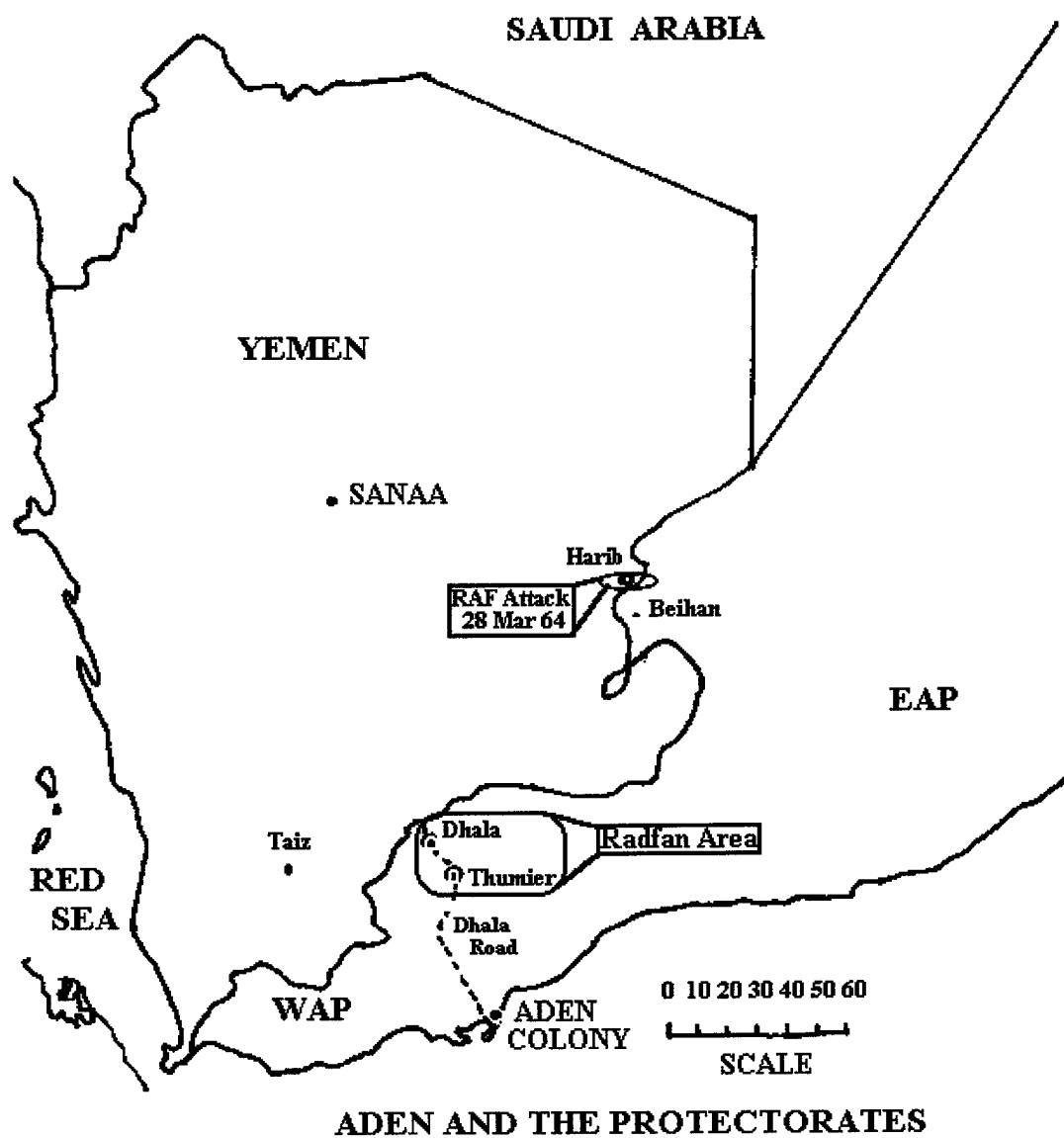


Figure 2. Aden and the Protectorates

for example, published the following regarding Britain's presence in Aden shortly after the Harib incident; "Unhappily it is so far no show-piece of British colonialism. British embarrassments are therefore likely to continue, but, short of repudiating a treaty, there is no way out."¹⁹ Was there no way out? Was there no solution to the British dilemma in Aden?

The British response to renewed hostilities in the Radfan following the FRA's withdrawal to Thumier in March was not much different than its response to Radfan hostilities in January. Instead of using the FRA supported by British regulars, the British Army supported by Marine Commandos, the FRA, and the RAF would constitute the military contingent known as "Radforce" and took the lead in the May operation. So concerned were the British over restoring law and order in the Radfan, HMG even considered using British forces deployed to Germany to reinforce operations in Aden.²⁰ Britain did not need to use its NATO forces, but the thought certainly captured the United States' attention. Nevertheless, the British sought a military solution to achieve its political ends. The goals of the May campaign were similar to those of Operation NUTCRACKER. In essence the British sought "to bring sufficient power to bear on the Radfan tribes" to 1) contain the tribal revolt; 2) reassert government authority; and 3) stop tribal attacks along the Dhala Road.²¹ The Radforce Commander, Brigadier R.L. Hargroves, saw two options to achieve the political goals. One was to attack and kill the dissidents and the second was to control strategic positions in the high ground to prevent Radfan dissidents from operating.²² Lacking sufficient intelligence on dissident numbers and locations and given the political backlash an attrition campaign would create, Brigadier Hargroves opted for the second choice. Moreover, Hargroves understood the dissidents objective to be the disruption of the Dhala Road to allow the rebels to "seep forward in conjunction with Nasser's 'holy war'"²³ The Radfan tribe's goal was no longer looting and harassment for their amusement as it had been earlier. The object was, as the Radforce commander stated, "to drive the British out of Aden."²⁴

Military operations commenced late on 30 April. Special Air Services forces used helicopters to move into key positions to prepare for the major assaults by British Army troops. The Radfani dissidents fought well using standard guerrilla tactics learned in Yemen. They were more than happy to trade territory for time and it was time and persistence that proved to be their greatest ally. By 5 May, however, the British had made their way into the heart of the Radfan and were in position to reassert government authority with the loss of only two soldiers and ten wounded.²⁵ After 5 May, Radforce conducted a denial or inverted blockade campaign to cut the dissidents off from their agricultural areas, deny them access to routes into Yemen, and lower enemy morale. In other words, the Radforce used proscription to achieve British political objectives. Air power, particularly helicopters for transport and lift and Hunters for close air support, was critical to Hargrave's plan, but the main effort rested with ground forces.

The British deemed the Radforce operation between 30 April and 5 May a success, but the operation failed to contribute to an overall desired end state within the Radfan or within the SAF as a whole. According to the *Times*, "the ultimate aim of the British operational plan is not entirely clear." Even if the dissidents were forced out of the Radfan, they would surely return unless the region was "continuously picketed and patrolled by a large British-Federation joint force." In other words, what the *Times* feared most was a "permanent and indecisive commitment" to the region.²⁶ These fears came to fruition when dissident activity continued.

Between 11 May and 11 June, Radforce objectives changed slightly. In addition to the campaign's original objectives, the next phase of operations sought to invade areas of prestige and provoke the dissidents into a conventional battle scenario. The Radforce

hoped to shame the dissidents through control of valued territory and inflict enough casualties on them to lower their morale to the point where the dissidents would seek peace terms with the government.²⁷ By mid-May the British realized their manpower limitations hindered the Radforce's ability to achieve its objectives. The British looked to limited air control operations to cover areas the Army physically could not occupy.²⁸ The British tasked these limited air control operations to maintain continuous and unrelenting pressure on the rebels, to make life generally impossible, and to oblige the dissidents to remain outside their home territory.²⁹ The combination of air control and ground occupation worked well. British persistence finally paid off when Radforce troops engaged a large number of dissidents in pitched battle at Shaab Sharah. The defeat of the dissidents and capture of Jebel Juriyah on 11 June satisfied the campaign's military objectives.³⁰ Air control operations continued between July and October and assisted the Army's overall occupation efforts. By 1 October, all dissident tribes had sued for peace except one. For all intents and purposes, the Radfan War was over. The British could deny dissidents access to the Dhala Road and conduct proscription operations from their strategic positions in the Radfan to assert government authority at will. Unfortunately, the "victory" in the Radfan did not translate well into the overriding political objective of an independent, pro-British SAF. With dissident activity suppressed in the Radfan, the NLF shifted its focus to Aden Colony.

In Aden, the NLF and other competing nationalist organizations launched an effective terrorist campaign against the British and the SAF. In the end, the British could find no solace in their efforts to maintain law and order in Aden. Britain tried valiantly to counter the nationalist-sponsored urban terrorism, but failed. The general election of 1964

brought the Labor Party to power in Great Britain with an entirely different colonial agenda than their Conservative predecessors. By 1966, the Labor Government had established a target date of no later than 1968 for SAF independence. When Britain changed its policy to support the SAF until it could stand on its own to a limited commitment within a specified time frame, the British military days in Aden were numbered. Nationalist organizations continued their harassment and terrorist activities against the British until the bitter end. The SAF government could not stand without British power and aligned itself with one of the contending nationalist organizations. By November 1967 all British land, air, and sea forces had departed Aden and the SAF ceased to exist as a credible entity.

Did the British experience in Aden have to end the way it did? Probably. Given the Cold War context, the rising influence of Arab nationalism, Egyptian support of Yemeni and Adeni revolutionaries, the anti-colonial movement, and the nature of the conflict in Aden, the British, in hindsight, were mired in the proverbial “no win” situation. Despite the “no win” nature of the conflict, two salient questions emerge from the British experience in Aden. First, could the British have achieved their political objectives in Aden and the Protectorates without the use of large numbers of ground forces? And second, could air control have been a more effective and efficient means of achieving British political objectives in Aden and hence provide valuable insight on the viability of air control as a tool of modern air power? This study offers a qualified yes to both questions.

Air power was unquestionably critical to British operations in Aden, but air control was used only sparingly and in support of ground occupation during the Radfan War. Sir

Julian Paget stated in his analysis of British policy in Aden that the Radfan campaign “hinged on the correct use of air.”³¹ Given the lack of roads, rough terrain, inadequate maps, and logistics requirements, only air power could provide the necessary information, supplies, and transport to meet Radforce mobility and firepower requirements. As an example, tactical airlift provided by RAF, Royal Navy, and Royal Army helicopters significantly reduced Radforce response time to critical situations. Helicopters could transport and equip a small picket on a mountain top in three minutes instead of the usual three hours.³² Air power could have been even more effective had the British possessed more air resources, especially helicopters. What was not addressed by British decision-makers, however, was why ground forces were used to physically occupy strategic points in the Radfan when air control could have achieved the same results without exposing ground forces to dissident attack. A review of the political and military objectives pursued during Radfan operations begs the question even further.

Above all other objectives, the British wanted to maintain law and order and assert the authority and ability of the government to impose its will on the Radfani tribes when and where it wanted. Air control operations in the 20s, 30s, 40s, and 50s accomplished these objectives with minimum force, limited casualties, significantly reduced cost, and without long-term resentment from the indigenous population. The various Radfan campaigns of 1964 sought to punish dissident tribesmen for subversion or to persuade potential rebels from joining the Yemeni-sponsored dissidents. The key difference between earlier air control operations and the use of ground forces in 1964 centers on dissident motivation. The instability from the 20s through the early 50s emerged from tribesmen eager to plunder caravans along the Dhala Road for economic gain. Air control

worked under those circumstances because the guilty knew they had committed a crime knowing the consequences of their actions. In essence, the various tribes of the Radfan consented to British justice through air control. The British reputation for retribution against the guilty coupled with the meticulous methodology used by the RAF to identify the transgressors and exact a punishment fitting within the cultural concerns of the Radfanis created a circumstance in which air control as a means to a political end was acceptable to all parties concerned.

The Radfani dissidents in 1964, on the other hand, were fighting for much more than economic gain. They sought independence and the ouster of the British from their homeland. Nationalism and effective propaganda fueled the dissidents commitment to higher ideals from which they would not be easily dissuaded. The sanctuary Yemen provided to Adeni dissidents limited British capability to use air control effectively within the WAP as well. When the RAF attacked Harib fort in Yemen in retribution for Yemeni attacks on Beihan, the British were assailed not only by the Yemenis, but virtually the whole international community through the United Nations. The political fallout from the Harib incident effectively stigmatized air power as an inappropriate tool of foreign policy and hindered any British consideration of using air control to achieve their SAF objectives in relation to Yemen.

Another reason for Britain's use of ground forces in lieu of air control was the air barrier. Once nations such as Egypt, Turkey, and Sudan discovered the power to deny access to their air space to Great Britain, HMG was forced to redefine its East of Suez policy. Without guaranteed freedom to transport troops from Britain, the Conservative

government wanted ground forces in the region to meet contingencies which might arise affecting vital national interests.³³

The British government tasked its ground forces to train the FRA to maintain internal security when the British left. Unfortunately for the British, the FRA would never stand alone. Nonetheless, when the State of Emergency occurred and the need to pacify the Radfan developed, it made sense to use the situation to test the mettle of the FRA. Although Operation NUTCRACKER was a military success, it ultimately overextended the FRA meager capabilities. When hostile activity began anew in March 1964, the British believed military action in the form of ground forces would best achieve their political objectives. Few decision makers questioned the efficacy of the use of British and FRA ground forces to achieve victory. With the exception of the High Commissioner, only a few advocated the use of air control to achieve the stated political objectives or considered the necessity of synchronizing a civil actions campaign with military operations. As Sir Trevaskis would later say, proponents of air control believed, "...the ground action would be less effective, more wasteful, and probably more dangerous than air action, that the presence of British troops in the Radfan could well excite far greater opposition than would otherwise be the case, that casualties which they would most certainly incur would delight our enemies, and cause doubt and dismay in Britain. In every respect, they were proved right."³⁴

Sir Trevaskis' analysis of the political-military situation was profound. Had the British used air control to restore law and order in the Radfan in 1964, British casualties would have been most certainly reduced, support for military operations among the British might have strengthened, and the need to garrison troops Radfan would not have been

necessary. RAF aircraft operating from the relative safety of Khormaksar could freely conduct air control operations against Radfan dissidents. The British possessed continuous air superiority over Aden and never faced a credible ground-based anti-aircraft threat. Air power's inherent characteristics of speed, flexibility, elevation and ubiquity allowed the RAF to respond quickly and effectively to dissident activity within the Radfan, day or night. The proscription operations conducted by the Royal Army and FRA could have just as easily occurred from air control. True, the nature of the conflict in 1964 was far different from the policing efforts of earlier decades, but given the results of the ground operations in 1964, air control could have achieved the same results at less cost. This study is not saying that air control would have changed the outcome of the British experience in Aden, only that air control could have achieved the same results of the ground campaign without the inherent costs and dangers associated with surface operations. The root causes of Britain's policy failure in Aden were political and are beyond the scope of this study. But one cannot separate the political aim from the military objective in understanding Britain's experience in Aden. Through a careful analysis of Aden's political-military situation since 1926, this study believes the insights gained from the RAF experience using air control in Aden can offer valuable lessons on the efficacy of air control and on how to better prepare the United States Air Force for similar contingencies in the future.

Notes

¹ The South Arabian Federation consisted of Aden Colony, parts of the Western Aden Protectorate, and several tribes from the Eastern Aden Protectorate. The British began the federation movement in the mid-1950s to anticipate eventual independence for the Aden Colony and associated hinterlands. The British hoped to create a "federation"

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friendly to the British government after British military forces left the area and ensure British influence in the Arabian Gulf region.

²Hoffman, 88.

³Lee, 203 and Karl Pieragostini, *Britain, Aden and South Arabia: Abandoning Empire* (New York: St Martin's Press, 1991), 71.

⁴Lee, 203.

⁵Pieragostini, 71.

⁶Pieragostini, 72 and Lee, 204.

⁷Lee, 204.

⁸Lee, 205.

⁹Lee, 207 and Paget, 49.

¹⁰Lee, 207 and Paget, 49.

¹¹Lee, 209.

¹²Lee, 209.

¹³Paget, 51-3.

¹⁴“British Attack on Yemen Fort: Denial of Civilian Casualties,” *Times*, 30 March 1964, 7 and “Britain Denies Accusation by Yemen: ‘Leaflet Warning Ignored,’” *Times*, 3 April 1964, 12.

¹⁵“Britain Denies Accusation by Yemen: ‘Leaflet Warning Ignored,’” *Times*, 3 April 1964, 12.

¹⁶*Times*, 11 May 1964, 12.

¹⁷Pieragostini, 72-3 and Paget, 52.

¹⁸“U.S. Anxieties Over Yemen Attack,” *Times*, 2 April 1964, 9. For additional background into the border violation and UN concerns see “Britain’s Warning Over Yemen,” *Times*, 25 March 1964, 11; “Britain Denies Accusation by Yemen: ‘Leaflet Warning Ignored,’” *Times*, 3 April 1964, 12; and “Call for Mediator on Yemen Border,” *Times*, 7 April 1964, 11.

¹⁹“Honouring a Treaty,” *Times*, 3 April 1964, 13. See also, “South Arabia Asks for R.A.F. Aid,” *Times*, 20 March 1964, 13.

²⁰“Full-Scale Action to Crush Guerrillas,” *Times*, 5 May 1964, 12.

²¹Paget, 55.

²²Paget, 59.

²³“Britons’ Heads Stuck on Posts,” *Times*, 4 May 1964, 14.

²⁴“Britons’ Heads Stuck on Posts,” *Times*, 4 May 1964, 14.

²⁵Paget, 60-80.

²⁶“Full-Scale Action to Crush Guerrillas,” *Times*, 5 May 1964, 12.

²⁷Paget, 83.

²⁸Paget, 85-7.

²⁹Lee, 213.

³⁰“Troops Capture Radfan Peak,” *Times*, 12 June 1964, 12.

³¹Paget, 104.

³²Paget, 104.

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³³The threatened invasion of Kuwait by Iraq in 1961 was an example of the kind of situation the British feared. When the Kuwaitis abrogated their defense treaty with the British in 1964, many Britons questioned the need for a British military presence in the region perhaps contributing to the Labor Party's decision to establish a fixed exit date for Aden.

³⁴Paget, 53.

Chapter 4

Air Control: The Renaissance

There is no panacea. A formula is harmful. Everything must be applied according the situation.

—Crown Prince Rupprecht

Much has changed in the world since the RAF departed Khormaksar in 1967. The Communist threat has evaporated. The Berlin Wall has fallen. The Cold War is over. No longer does the threat of nuclear holocaust loom over the world. Violent conflict among nations and peoples, however, has not ceased. Aggression, such as the Iraqi invasion of Kuwait, and civil strife in Bosnia, Chechnya, and Rwanda/Burundi continues. Air power's significant role the Gulf War has renewed debate on the efficacy of air power as a foreign policy tool. Air operations such as DENY FLIGHT and PROVIDE COMFORT have generated discussion on air power's role for the future. As a result of these operations, the concepts of air occupation and air control have emerged as a key terms in today's debate on doctrine and roles and missions of the military. One important question within the debate concerns the feasibility of air power or more specifically air control to offer a solution to the political and military dilemmas of today? This study purports that the RAF experience with air control in Aden, while no panacea, does offer a viable means to achieve certain political objectives within appropriate circumstances in today's turbulent world.

To better understand the significance of the renewed debate on air control, however, both concepts must be clearly defined and understood. The RAF never fully codified air control in its doctrine, but essentially defined it as the predominant use of air power in conjunction with surface support forces to achieve and maintain law and order in remote areas. Influenced by the British experiences in Aden and Iraq, American air strategists in the 1950s defined air control in much the same way. The 1950s American version defined air control as “the use of aircraft as the primary arm to support the political administration for the purpose of creating and restoring law and order within or outside its borders.”¹ The most current variant of the air control debate involves the concept of air occupation. The most outspoken proponent of air occupation is Air Force Colonel John Warden. He has generated a revival of sorts surrounding the role of air power as the dominant military tool to achieve American political objectives for the next century. Warden firmly believes that “the concept of air occupation is a reality and in many cases it will suffice” to meet the challenges of the future.² He insinuates that air power can and should be the primary means to achieve political objectives in the post Cold War world. Colonel Warden, however, does not clearly define air occupation, but implies it fulfills the same role as traditional ground force occupation without the physical presence of troops in occupied territory.

Air Force Major Gary Cox, on the other hand, offers a more precise definition of air occupation. He defines it as “the use of air and space power in the intrusive control of specified territory, or territorial activities, of an adversarial nation or group for a specified period of time.”³ Cox also offers some defining characteristics of air occupation which are essential to understanding the concept. These characteristics are: 1) air superiority; 2) the

desire to limit or eliminate use of ground forces; and 3) the use of other air elements (i.e. - intelligence, surveillance, presence, and deterrence).⁴ This study offers the following for debate as a contemporary definition of air control: the predominant use of air and space power, lethal or non-lethal, in conjunction with surface elements to help achieve diplomatic, economic, informational, and/or military objectives necessary to impose a state's or group of state's will upon another entity for a given period of time. This definition is essentially a synthesis of earlier air control definitions coupled with the benefits of today's technology. Cox's definition of air occupation is closely related to this study's definition of air control and could probably be used interchangeably.

Both definitions implicitly rely on air superiority as a prerequisite to air control's success. The differences between air control and air occupation, however, are subtle and center to a certain degree on means and ends. The difference between air occupation and air control centers on the primacy of air power. Colonel Warden's concept of air occupation implies the almost exclusive use of airpower to occupy a specified territory or area while air control emphasizes air power as the primary means supported by surface-based elements to achieve political ends within limited geographically areas. Although the difference are small, this study advocates air control as the optimum definition because it most closely describes what air power can and cannot do to control a specific area or situation based on the British experience in Aden. Both definitions, however, are relevant to today's debate on air power and should be understood and analyzed by air power theorists.

The following general tenets, benefits, and limits associated with air control are also offered for debate on the efficacy of air control for the future and serve as possible guidelines for future Air Force and joint doctrine.

When Air Control Works Best

Based on the RAF's cumulative experience in Aden, this study offers the following circumstances in which air control is generally most effective. Air control works best:

1. When the state using air control possesses absolute or relative air superiority over the area to be controlled.
2. When air control objectives are congruent with the state's political aims. Political and military objectives must be clearly defined and achievable. Ideally, the state using air control has defined a realistic end state with associated measures of success and specified duration to ensure air control meets the state's ultimate aims.
3. When air control is applied in remote areas such as the desert or barren, mountainous regions lacking a well-developed transportation or communications infrastructure.
4. When the affected population consents to the state's authority and accepts punishment or persuasion without long-term resentment. Saddam Hussein's use of armed helicopters to control Shi'ites in southern Iraq, however, clearly demonstrates that consent is not absolutely essential to apply air control techniques.
5. When it is applied in a manner consistent with cultural traditions, values, and mores of the affected territory. Air control may not be the most effective means of achieving a state's objectives in all situations.

6. When precision is paramount. When lethal means are used to achieve or maintain air control, only the “guilty” populations should be targeted. Collateral damage must be eliminated or minimized at best to reduce resentment among the affected peoples and prevent a negative media image.

7. When quality human intelligence (HUMINT) is available. National technical means and other reconnaissance and surveillance assets provide valuable information about terrain, weather, and large force movements but normally only HUMINT can reveal intent. Political officers and reliable indigenous agents are critical to air control’s success.

8. When the affected populations centers of gravity (COGs) have been identified and analyzed. Not all COGs are best influenced are best influenced or targeted by air control.

9. When minimum force is a guiding principle. Air power’s flexibility, range, speed, elevation, and ubiquity, however, allow rapid transition from minimum to maximum force when circumstances dictate.

Air Control Benefits

If the circumstances are appropriate for air control, its use can reap the following benefits over physical occupation by ground forces:

1. Air control will reduce the overall risk of friendly and affected population casualties.
2. Given air power’s inherent characteristics of mobility and flexibility, air control provides a more timely response to situations than traditional ground troops.
3. With improved technology, air power can deliver precision guided munitions with near perfect accuracy. Improved technology also provides for enhanced command and

control procedures virtually guaranteeing the most timely response to developing situations as quickly as humanly possible.

4. Air control can achieve political and economic objectives through an air blockade without exposing ground forces or to hostile fire.

5. Air power can control area without physical occupation. The presence of foreign troops on an affected population's soil normally breeds resentment and contempt. Air control eliminates the need for significant numbers of ground forces in a controlled territory.

6. Air control operations are normally less costly and less manpower intensive than traditional ground-based operations.

The Limits of Air Control

Air control, however, is not a panacea. It does have its limitations even under the most ideal circumstances. The following are limits of air control to be considered prior to implementing an air control operation:

1. Air control is normally "stick" oriented. The necessary "carrots" to achieve a state's political objectives must be incorporated into an air control operation. Air power can provide some "carrots" to include famine relief, medical evacuations, and general transportation requirements.

2. Air control does not work well when the populations being controlled have access to a sanctuary. The ability of the Adeni dissidents to cross into Yemen and back into the WAP at will significantly reduced the effectiveness of air control.

3. The international political environment can render air control useless. Given the Cold War, Pan-Arab, Nasser-dominated world of the early 1960s in Aden, air control was a politically unacceptable although militarily viable solution to the Radfan situation in Aden. The air barrier proved to be a significant issue in the British decision to base and use ground force to pacify and control the Radfan region in 1964.

4. The impermanence of air power can be a limiting factor in air control. Air power normally achieved short-term results in Aden. The pre-World War II air control effort tended to sustain longer periods of effective control, but never permanent pacification. If air control is used in the future, it may require a long-term commitment of the state using air control to achieve its desired end state.⁵

5. There are still technical limitations to air power. Air power cannot do all things in all situations. Even with the great advances in precision weapons and intelligence collection, air control is still a human endeavor subject to human shortcomings.

6. Air control has limited effectiveness in urban situations. Helicopter support to ground-based anti-terrorist forces and perhaps air or space-borne intelligence sensors seem to be the limit of urban air control capabilities. With improved technological capabilities, perhaps the urban issue will be more conducive to air control in the future.

7. Lastly, there is the moral issue. The image of the powerful British bully brutalizing weak and defenseless Radfani tribesmen was powerful enough to preclude air control as an option during the Radfan War. In today's CNN-type world, air power's perception as "overkill" and "immoral" might limit national decision-makers inclination to use air control to achieve national political objectives.

The British air control experience in Aden is fraught with insights and concerns. Air control did reduce manpower requirements, save money, and limit casualties in its heyday prior to World War II. Events and circumstances after the war limited air control's applicability in Aden. But events have changed the world once again creating a environment where air control can be reborn as a possible military alternative to achieve American foreign policy objectives. The RAF experience with air control in Aden has a lesson for air power strategists and political leaders of today. Air control can, given the appropriate circumstances, be a viable and desirable option for national decision-makers to use to achieve national strategic objectives. The challenge is knowing when to use air control and ensuring it is applied within its operational parameters.

Notes

¹PCR 1, 9.

²Col John A. Warden, III, "Air Theory for the 21st Century," in *Challenge and Response: Anticipating US Military Security Concerns* ed Dr Karl P. Magyar et al. (Maxwell AFB, AL: Air University Press, 1994), 329.

³Major Gary Cox, "Airpower as a Tool of Foreign Policy: Air Occupation," in *War and Conflict Resolution*, (Maxwell AFB, AL: Air Command and Staff College, January 1997), 21.

⁴Cox, 22.

⁵Air Vice Marshal C.B. Mavor, "Modern Air Power," *Royal Uniformed Services Institute Journal*, 112 (February 1967), 10 and Gavin, 298.

Chapter 5

Air Control: The Future

Practical experience shows only what has worked well in the past, but concepts are needed to project that experience forward into the future.

—Andrew G. B. Vallance

The nature of warfare will continue to change as the world heads towards the twenty-first century. The fall of the Soviet Union served as a catalyst to rising nationalism and increased internal security situations throughout the world. No longer does a bi-polar world and the inherent threat of nuclear holocaust limit the magnitude of civil and international conflicts. As the United States pursues its national strategy of engagement and enlargement into the next century, the American military will be called upon to perform operations beyond the scope of traditional, conventional warfare that has dominated the most of the twentieth century. The Cold War scenarios ingrained into the political and military strategists psyche are no longer likely to occur. The political crises of the future will probably require military forces to perform contingency operations to include peacekeeping, peacemaking, or nation assistance. The SOUTHERN WATCH, DENY FLIGHT, and PROVIDE COMFORT operations of the 1990's provide a compass for the future of military operations. If this study's vision of the future is accurate, what can the air control concept offer to meet the political, economic, and military challenges of the next century?

To meet the demands of anticipated military operations of the future, air control as defined by this study offers a proven, cost-effective means to achieve national or international political objectives. Air control is not a universal solution to all possible political problems of the future. Under the right circumstances, however, air control offers the United States or potentially the United Nations a proven concept to achieve its aims. To demonstrate what air control could offer to the unified regional Commander-in-Chief's (CINC's) in reposes to National Command Authority (NCA) tasking, this study offers the following hypothetical, but realistic scenario to demonstrate air control's potential utility for the future.

In this study's hypothetical scenario, the NCA has tasked the CINC United States European Command (USEUCOM) to develop and execute a contingency plan for nation assistance in Chad. Tensions between Chad and Libya over the disputed Aozou Strip have increased since Libya completed its withdrawal from the disputed territory in accordance with the 1994 International Court of Justice ruling.¹ To solidify its claim to the new territory, the Chadian government has asked the United Nations and the United States to assist its efforts to incorporate the new territory peacefully. The Libyan government has agreed reluctantly to recognize the new border with Chad, but Libyan ground forces are poised for action near the Aozou Strip. Due to the remoteness of the Aozou Strip and the lack of communications or transportation infrastructure, the Chadian and Libyan governments are unable to maintain law and order in the region. Both Chad and Libya agree to United Nations Security Council Resolution 999 (UNSCR 999) which authorizes the use of military force to maintain the peace in the region during the three-month transition period.

UNSCR 999 asks the United States to take the lead in organizing a military force to maintain peace between Libya and Chad, to maintain law and order in the disputed territory, and to provide the necessary humanitarian and nation assistance measures to create a long-lasting peace. The United States Congress passes a joint resolution supporting UNSCR 999. The Secretary of Defense tasks USEUCOM to provide the military means necessary to achieve the United Nations objectives. The CINC USEUCOM's planning staff recommends an air control operation with associated surface support to achieve the UNSCR 999 objectives in a cost-effective and manpower limited manner. USEUCOM coordinates specialized support from USSOCOM and United States Central Command (USCENTCOM). Earlier, in diplomatic efforts, negotiations between the United States, the United Nations, Libya, Chad, Egypt, and Algeria provided USEUCOM forces access to adequate airfields in Algeria and Egypt to conduct air control operations. Various Non-Governmental and Private Voluntary Organizations have offered their services to meet United Nation's and Chadian requests for medical and food support to aid in the transition. Once Chad and Libya have given their consent to the United Nation's plan and USEUCOM involvement, air control operations begin.

After all the required military planning and coordination has occurred, USEUCOM-controlled aircraft begin the air control mission over the 100,000 square kilometer Aozou Strip by conducting 24-hour AWACS surveillance and RC-135 reconnaissance operations. Space-based sensors are tasked to aid military planners and civilian authorities in their quest to demarcate the new border peacefully and accurately while ensuring the Libyans do not deploy additional forces to the new border. Airfields in Algeria and Egypt are readied for US C-130 airlift operations to needy tribes in the region. US Army helicopters

deployed to Egypt are tasked to deliver physicians and supplies from Medicins sans Frontieres to appropriate tribes within the Aozou Strip. The helicopters also transport United Nation political officers and Chadian and Libyan officials to answer questions and ease tensions that may occur as a result of the transfer of territory. While these operations are occurring, American F-15's operating out of Egypt conduct air superiority missions under control of AWACS aircraft. Because of Libyan compliance with UNSCR 999, the threat to air assets is minimal. Back in Egypt, an AC-130 gunship remains on alert to respond to situations which may require its firepower or an air demonstration to resolve.

After conducting air control operations for three months, the border is fixed and accepted by both sides. The only significant challenge to the transition came from a recalcitrant tribe of nomads who refused to negotiate with United Nation representatives over watering rights in a oasis formerly in Libyan territory. When the tribal leaders threaten to hold the United Nation representatives hostage, AWACS operators monitoring the negotiations called in a show of force from US Army attack helicopters operating south of the negotiating site. Once the helicopters arrive, the tribal leaders negotiate their grievances in good faith and an acceptable solution is concluded. With internal security maintained, the border issue resolved, and the humanitarian and nation assistance missions successful, the United Nation's Security Council declares the operation complete and USEUCOM and associated forces return to their home bases. Air control has achieved the desired end state in Chad with minimal force, no casualties, and relatively low cost when compared to a ground-based nation assistance effort in the remote area of northern Chad and southern Libya. Air control proves its efficacy once again.

Even though the hypothetical Chadian-Libyan scenario is a bit optimistic, this study believes it is realistic enough to show how air control can and should be used in the future. Based on the RAF experience in Aden and the constraints placed on future military operations, the scenario shows how a regional CINC's contingency plan or functional plan can be developed and implemented around air control to achieve political objectives. As in Aden, air control was successful in this scenario because it could be used in a remote desert area which lacked sufficient transportation and communications infrastructure to conduct humanitarian and show of force operations when necessary. The potentially hostile parties involved in the scenario, Chad and Libya, consented to United Nation's supervised air control operations over the Aozou Strip. Air superiority was a given and properly negotiated basing issues with Egypt and Algeria allowed USEUCOM to operate in proximity to the air control area. The Aozou Strip was a realistic amount of territory to monitor and control by air assets. All of these circumstances created an ideal environment in which to conduct air control operations. Realistically, air control efforts in this scenario would not go as smoothly since the study failed to factor "friction" into the operations. Nonetheless, the principles of air control developed by the RAF in Aden and the futuristic Chadian-Libyan scenario demonstrate the viability and applicability of air control as an asymmetric means for American warfighting CINCs to achieve political and military objectives as the world moves towards the twenty-first century.

Notes

¹Central Intelligence Agency, *The World Fact Book 1995*, 83-84 and 247-249. See also Andrew G. B. Vallance, *The Air Weapon: Doctrines of Air Power Strategy and Operational Art* (New York: St Martin's Press, 1996), 90. Vallance discusses the French use of air control in Chad during 1986 in Operation EPERVIER. His discussion is limited and did not contribute to the hypothetical scenario used in this study.

Appendix A

Warning

To the Aqils of the Ahl Yehya and Ahl Fejjar

You have recently been addressed by three letters by Government in which you were desired firstly to submit to your Sultan Muhammed Sarur: this you refused to do but Government is patient and subsequently ordered you to hand in three named hostages (names) to your Sultan at Milah in the presence of a Political Officer who has instructions to send them to Tor Al Baha where they would be detained pending an enquiry in Lahej by the Abdali Sultan, Haushabi Sultan and by the British Agent, Western Aden Protectorate; this you refused to do but Government is compassionate and merciful and finally ordered you to send in the three named hostages to Aden where they would be dealt with in the manner described above. This you have also refused to do and made it clear in spite of Government's patience and desire to help you it is your deliberate intention to be classed as rebels both to your Sultan and to Government.

You are now ordered to hand in the three hostages and twelve serviceable rifles and make your submission to Government before dawn on Monday April 12 (3/6/1367) failing which air action or land action or both will be taken against you starting the same day. Warn all Radfanis and friendly tribes to leave the whole of the Raha area at once or they will suffer your fate if you do not submit.

Be wise and submit before it is too late.

9 April 1948

(Sgd) B W SEAGER

British Agent

Western Aden Protectorate¹

Notes

¹Lee, 299.

Appendix B

NLF Leaflet

English Translation

HOW TO DISTURB THE BRITISH

In addition to the commando-acts, it is possible to destroy anything connected with the British, by:

1. Rendering their air conditioners useless—in their houses or in their offices.
2. By pouring sugar or earth in the petrol tanks of their cars.
3. By puncturing their tyres with nails or other things.
4. By breaking the water pipes in their houses or offices.
5. By making the British cars that are parked near their houses or offices useless, by puncturing the tyres, pouring sugar or earth in the petrol tanks, by breaking the glass or breaking other things.
6. By opening the oil-pipes, and letting oil run out.
7. By distributing leaflets in English and leaving them in British-owned cars or sending them by post to British people.
8. By setting fire to their cars, NAAFI's petrol and arms stores, and to anything British which is inflammable.¹

Notes

¹Paget, 263.

Glossary

ACM	Air Chief Marshal
AOC	Air Officer Commanding
APL	Aden Protectorate Levies
AWC	Air War College
CINC	Commander-in-Chief
EAP	Eastern Aden Protectorates
FRA	Federation Regular Army
GOC	Ground Officer Commanding
NLF	National Liberation Front
RAF	Royal Air Force
SAF	South Arabian Federation
WAP	Western Aden Protectorates

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